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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/700,093 | 11/10/2000 | Lucian Hirsch | P00-1767 | 1415 |

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EXAMINER

ZHEN, LI B

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2126

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/700,093

Applicant(s)

HIRSCH ET AL.

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,404,743 to Meandzija in view of U.S. Patent No. 5,987,514 to Rangarajan.

As to claim 1, Meandzija teaches transmitting state information [three types of notifications which an agent can send to a manger....an alarm notification, a state change notification, and a value change notification; column 13, lines 55 – 67] between an agent [SNMP agents 130, 140 and 150, Fig. 1] and a manager [SNMP management station 110, Fig. 1] for a state realignments [management agents may also synchronously provide the management station 110 with important unsolicited information; column 10, lines 3 – 15];

sending, by the manager, a request message [event information] for performing the state realignment to the agent [events processing module 224 is used to provide event information that is communicated to the agent to define pre-conditions for the agent to generate an event; column 10, lines 57 – 67];

checking, by the agent, the state information with regard to deviations from a normal state [monitoring data associated with the agent to determine if the pre-conditions have been met; column 4, lines 55 – 65]; and

sending, by the agent, changes in the state information to the manager in one or more successive messages [generating the event at the agent and communicating a notification regarding the event from the agent to the management station via the network; column 4, lines 55 – 65]. Meandzija does not specify an agent of one management level communicating with a manager of a next-higher management level.

However, Rangarajan teaches an agent of one management level [Low-level agent: An agent that retrieves the value of the requested attribute from the MIB associated with the device which is forwarded to the mid-level agent or manager; column 3, lines 40 – 56] communicating with a manager of a next-higher management level [Mid-level manager: A mid-level agent that receives event requests from the network manager; column 3, lines 40 – 56].

It would have been obvious to a person of ordinarily skilled in the art at the time of the invention to apply the teaching of communication between an agent of one management level and a manager of a next-higher management level as taught by Rangarajan to the invention of Meandzija because this allows mid-level managers to perform the basic monitoring function of retrieving attribute values from one or more low-level agents that are under the mid-level manager's control [column 3, lines 40 – 46 of Rangarajan].

As to claim 17, this is a system claim that corresponds to method claim 1; note the rejection to claim 1 above, which also meets this system claim.

As to claims 2 and 18, Meandzija teaches utilizing state attributes selected from the group consisting of an operational state [operational state], an administrative state [an event forwarding discrimination group, which includes an administrative state, an operational state; column 11, lines 38 – 45] and a usage state [usage state 420; column 12, lines 29 – 36] as state information.

As to claims 4 and 20, Meandzija teaches utilizing state attributes for characterizing an operational readiness [operational state 415 describes the operational state of the unit represented by the agent/subagent; column 12, lines 13 – 28], manageability [administrative state 410 describes the administrative state of the unit represented by the agent/subagent; column 11, line 65 – column 12, line 2] and use of a resource [availability status 435 describes-the availability status of the unit represented by the agent/subagent; column 12, line 65 – column 13, line 9] supported by the agent in the communication system as state information.

As to claims 24 and 29, Meandzija teaches utilizing state attributes selected from the group consisting of an unknown state [unknown status describes the unknown status of the unit represented by the agent/subagent; column 13, lines 27 – 34], an alarm status [alarm status 430 describes the alarm status of the unit represented by the agent/subagent; column 12, lines 54 – 65], and an available status [availability status 435 describes-the availability status of the unit represented by the agent/subagent; column 12, line 65 – column 13, line 9] as state information.

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As to claims 3, 19 and 25, Meandzija teaches the normal state is defined by values for the state attributes [state values and state transitions are as defined in the ITU-T X.731 standard; column 11, line 65 – column 13, line 33] selected from the group consisting of an operational state, an administrative state, a usage state, an unknown state, an alarm status [value defined for the alarm status in the X.731 standard is a set of enumerated values; column 12, lines 54 – 65], and an available status [value defined for the availability status in the X.731 standard is a set of enumerated values; column 12, line 65 – column 13, line 9].

As to claims 5 and 21, Meandzija teaches utilizing status attributes, which specify for a resource supported by the agent in the communication system whether it is in an unknown state [unknown status describes the unknown status of the unit represented by the agent/subagent; column 13, lines 27 – 34], in an alarmed state [alarm status 430 describes the alarm status of the unit represented by the agent/subagent; column 12, lines 54 – 65] or in a state of availability [availability status 435 describes the availability status of the unit represented by the agent/subagent; column 12, line 65 – column 13, line 9], as state information.

As to claim 6, Meandzija teaches sending by the manager in the request message a correlation information item for a correlation of the respective request with messages containing changed state information received by the agent [Event Forwarding Discriminator (EFD) Group 530 comprises EFD configuration information defining what types of events an EFD will transform into notifications, at what times of

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day it will do so, and to which managers it will send the notifications to; column 13, lines 48 – 55].

As to claim 7, Meandzija teaches sending by the agent in a message for starting the state realignment, a correlation information item for correlating the messages containing changed state information subsequently sent with the state realignment started in each case [once the agent generates an event as specified in the Event table 515, it checks an EFD Table 535 to find an EFD that matches that event and specifies what kind of notification is to be generated, and to which manager that notification is to be sent; column 14, lines 8 – 15].

As to claim 8, Meandzija teaches sending the correlation information generated by the agent in the message or messages containing the changed state information [generating the event at the agent and communicating a notification regarding the event from the agent to the management station via the network; column 4, lines 55 – 65].

As to claims 9 and 22, Meandzija teaches sending by the manager a parameter to the agent and controlling the state realignment in dependence on the parameter [event information also defines EFD information that defines pre-conditions for communicating a notification of an event from the agent 230 to the management station 210 via the network 160; column 10, lines 57 – 67].

As to claims 10 and 23, Meandzija teaches sending by the manager a parameter and automatically initiating the state realignment [automatic schedule] by the agent utilizing the parameter [the agent may have an automatic schedule which defines time

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periods in which a notification may be provided for certain events; column 6, lines 13 – 21].

As to claims 11 and 12, Meandzija teaches providing a parameter by the manager with a parameter value which specifies a starting time [start time] and end time [stop time] for the automatic state realignment [scheduling function 540 includes specifications of a daily start and stop time and a weekly mask specifying when the EFD changes availability status from off-duty to available; column 14, lines 16 – 33].

As to claim 13, Meandzija teaches providing by the manager a parameter with a parameter value which specifies a time interval [time periods] for a repetition of the automatic state realignment [the agent may have an automatic schedule which defines time periods in which a notification may be provided for certain events; column 6, lines 13 – 21].

As to claims 14 and 26, Meandzija teaches providing by the manager a parameter with a parameter value which characterizes resources for which changed state information [specifies what type of notification] must be transmitted by the agent [Each EFD specifies what type of notification is to be sent for an event that has occurred in the agent; column 13, lines 55 – 67].

As to claims 15 and 27, Meandzija teaches providing, by the manager, a parameter [control status] with a parameter value that permits interruption [suspended] of a running state realignment [control status describes the control status of the unit represented by the agent/subagent with the possible values of subjectToTest, partLocked, reservedToTest, suspended, and free; column 13, lines 8 – 19].

As to claims 16 and 28, Meandzija teaches sending, by the manager, the parameter to the agent in the request message [events processing module 224 is used to provide event information that is communicated to the agent to define pre-conditions for the agent to generate an event; column 10, lines 57 – 67].

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,170,005 to Meandzija teaches providing synchronization and information exchange in a network.

U.S. Patent Application Publication No. 2002/0085571 to Meandzija teaches an enhanced Simple Network Management Protocol management system for telecommunications networks.

U.S. Patent No. 6,351,213 to Hirsh teaches a communication system for processing alarms using a management network involving several layers of management.

U.S. Patent No. 6,420,968 to Hirsh teaches handling alarms using a management network that has a number of management levels.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406. The examiner can normally be reached on Mon - Fri, 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (703) 305-8498. The fax phone

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number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Li B. Zhen
Examiner
Art Unit 2126

lbz
September 4, 2003



JOHN FOLLANSBEE
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